



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,651	10/31/2005	Charles Mark Lindall	JMYS-128US	5162
23122	7590	01/13/2010		
RATNERPRESTIA			EXAMINER	
P.O. BOX 980			MCDONOUGH, JAMES E	
VALLEY FORGE, PA 19482				
			ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			01/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,651

Applicant(s)

LINDALL ET AL.

Examiner

JAMES E. MCDONOUGH

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 7-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ridland et al. (EP 0 812 818 A1).

Regarding claims 1 and 6

Ridland teaches a catalyst comprising the reaction product an orthoester or condensed orthoester of metal such as titanium or zirconium, an alcohol containing at least two hydroxyl groups, a 2-hydroxy acid and a base (abstract).

Although, Ridland does not teach that the ratio of base to 2-hydroxy acid is 0.01-0.6:1, Ridland does teach "Frequently the amount of base used is sufficient to fully neutralize the 2-hydroxy carboxylic acid but it is not essential that the acid be fully neutralized. Therefore, for monobasic 2-hydroxy acids such as lactic acid, the preferred

amount of base is in the range 0.8 to 1.2 mole per mole of 2-hydroxy acid", which shows using less than 1:1, further the reference teaches "In the case of citric acid (a tribasic acid), the preferred amount [of base] is in the range 1 to 3 moles base per mole hydroxyl acid" (page 3, fourth full paragraph), Which would suggest to the skilled artisan using 0.67-1:1 base per acid equivalent, however the amount of base used would have been determined through routine experimentation in the art, absent any evidence of unexpected result or criticality for the specifically claimed range.

Regarding claim 2

Ridland teaches diethylene glycol (page 3, first full paragraph).

Regarding claim 3

Ridland teaches the use of lactic acid (page 3, fourth full paragraph).

Regarding claim 4

Ridland teaches the use of 1 to 4 moles of acid per mole of metal (page 3, third full paragraph).

Regarding claim 5

Ridland teaches the use of sodium hydroxide (page 3, fourth full paragraph).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/432,510. Although the conflicting claims are not identical, they are not patentably distinct from each other because the catalyst of the reference has additional components, however the comprising language of the instant invention does not disallow this.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments submitted 1/4/2010, have been fully considered, but are not persuasive for the reasons given below.

Applicants submit a declaration in an attempt to overcome the obviousness rejection.

Applicants argue that when base is used at ratios of 0.8 or higher then an undesirable viscous gel is formed, where surprisingly when the claimed range of 0.01-0.6:1 is used, a clear mobile liquid is formed. This is not persuasive for at least the following reasons:

- 1.) The results are not fully commensurate with the full scope of the claims.
- 2.) The declaration does not compare the closest prior art, i.e. comp B uses 0.8 moles of base and comp C uses 0.4 moles of base, but the claim teach up 0.6 moles of base, and these results have not been compared.
- 3.) Applicants substitute 1,4-butane diol for ethylene glycol, however the instant invention is not limited to 1,4-butane diol, and the prior art clearly teaches the use of ethylene glycol, however these have not been compared.
- 4.) Applicants have not shown criticality or unexpected results for the full range of base, and specifically have not compared the lowest amount of base claimed to the maximum amount of base claimed to the lowest amount of base claimed, to the lowest amount of base from the reference.
- 5.) As many different bases can be used, which would have different strengths, the use of a single base in the comparisons does not show criticality for the full scope of the claimed invention.
- 6.) This does not argue as to why it would not have been obvious to adjust the amount of base used through routine experimentation, as suggested in the rejection.

Applicants argue against the 102 rejection over Ridland.

The amendments to the claims overcome this rejection, and therefore it has been withdrawn.

Applicants argue against the 103 rejection over Ridland.

Applicants argue that no prima facie case of obviousness has been shown, and even if it was, the declaration submitted shows unexpected and critical results. This is not persuasive for the same reasons given above with regard to the declaration.

Applicants argue that the range of base used in Ridland does not overlap with the amended range of claim 1. While this may be true, it is not persuasive as this has been addressed in the rejection, which applicants have not persuasively argued against it being obvious to adjust the amount of base through routine experimentation, and applicants have failed to demonstrate any criticality between the claimed range and the closest prior art, i.e. applicants do not compare 0.8 moles of base to 0.6 moles of base, or show that ethylene glycol will form a gel in the way the 1,4-butane diol does.

It is noted that the fact that 1,4-butane diol tends to gel with higher amounts of base, does not show unobviousness, as the instant invention and the reference clearly teach the use of ethylene glycol, and the instant invention does not require the use of 1,4-butane diol, and applicants even admit that this is not a problem with the use of ethylene glycol.

It is noted that the lower glass transition temperature and the higher crystallization temperature do not demonstrate criticality between 0.6 moles of base and 0.8 moles of base, and as such do not rebut the obviousness as alleged.

Applicants argue against the double patenting rejection.

Applicants argue that the reference does not read on the instant invention in terms of the ratio of base to 2-hydroxy acid. This is not persuasive because looking at claim 8 we can see that as much as 3.5 moles of acid are use to as little as 2 moles of base, which reads on 0.57:1, in side the range of 0.01-0.6:1 as instantly claimed.

Applicants argue unexpected results this is not persuasive for the same reasons given above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES E. MCDONOUGH whose telephone number is (571)272-6398. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571)272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James E McDonough/
Examiner, Art Unit 1793